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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,295	02/26/2004	John W. Clapper JR.	21365	3436

7590

11/21/2006

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EXAMINER

TORRES, ALICIA M

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 11/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/786,295

Applicant(s)

CLAPPER, JOHN W.

Examiner

Alicia M. Torres

Art Unit

3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Risch 5,111,602 in view of Heiple et al. 6,209,237 and Wilson 3,325,926.
3. Regarding claims 1-7 and 16, Risch discloses a grappling assembly for a machine having a boom, comprising:
 - A dipper stick (30) pivotally connected to a boom (not shown)
 - An implement (44) connected to the dipper stick (30)
 - Means (38) for moving the implement (44) relative to the dipper stick (30)
 - An arm (50a,b) connected to the underside of the dipper stick (30) and movable between a grappling position and an inoperative position
 - Means (16a,b, 38) for pivoting the arm (50a,b) relative to the dipper stick (30)
 - Means (59, 66a,b) for detachably latching the arm (50a,b) in the operative position including the arm (50a,b) having a transversely extending recess (66a,b), as per claim 1; and
 - The means (16a,b, 38) for moving the arm (50a,b) is receivable within the arm (50a,b) when the arm (50a,b) is inoperative, as per claim 2; and

Art Unit: 3671

- The means (16a,b, 38) for pivoting the arm comprising a fluid actuated cylinder (38), as per claim 3;
- The arm (50a,b) having a jagged edge (25), as per claim 7.

However, Risch fails to disclose wherein the latching means includes the dipper stick having a yieldably biased, transversely displaceable protuberance tripable upon engagement by the arm and receivable in the recess when the arm member is pivoted between the operative and the inoperative position;

wherein in the inoperative position, the arm member is disposed along an underside of the dipper stick;

wherein the means operatively interconnect underside of the dipper stick and the arm member, as per claim 1; and

- The protuberance has a curved outer surface and biased by a spring seated in the dipper stick, as per claim 4; and
- a bracket having a pair of outwardly, yieldingly biased protuberances
- recesses registerable with the protuberances in a snap-fit manner, as per claim 5; and
- the biasing force exerted on the protuberance sufficient to yieldably bias the protuberance in the recess yet insufficient to retain the protuberance therein upon pivoting from the inoperative to the grappling position, as per claim 6; and

wherein said member having said recess includes an element disposed in a plane perpendicular to the pivotal axis of said arm member and including said protuberance biased in an extended position, engageable with said protuberance in camming relation to cause said

Art Unit: 3671

protuberance to displace and then be inserted into said recess when said arm member is angularly displaced to said inoperative position, as per claim 16.

Heiple et al. discloses a similar grappling assembly including an arm member (30) interconnected to the underside of the dipper stick (10, at 34) such that in an inoperative position, the arm member (30) is disposed along an underside of the dipper stick (10).

Wilson teaches the use of a pair of outwardly, yieldingly biased protuberances (54) and recesses (43) registerable with the protuberances (54) and tripable upon engagement by the piece (26) and receivable in the recesses (43); and

- The protuberance (54) has a curved outer surface (see the embodiment 41 of Figure 4) and biased by a spring (52) seated in the bracket
- a bracket having a pair of outwardly, yieldingly biased protuberances (54)
- recesses (43) registerable with the protuberances (54) in a snap-fit manner
- the biasing force (by spring 52) exerted on the protuberance sufficient to yieldably bias the protuberances (54) in the recesses (43) yet insufficient to retain the protuberances (54) in response to pivoting.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the arm member location of Heiple et al. on the device of Risch in order to avoid interference with the bucket operation.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the connection of Wilson on the device of Risch in order to securely retain parts of an excavation device.

Art Unit: 3671

4. Regarding claims 8-15, Risch discloses an assembly comprising:

- An arm (50a,b) connected to the underside of the dipper (30)
- Means (16a,b, 38) for pivoting the arm (50a,b) for grappling objects
- Means (59, 66a,b) for detachably latching the arm (50a,b) in the inoperative position including the arm (50ab) having a transversely extending recess (66a,b), as per claim 8; and
- The means (16a,b, 38) for moving the arm (50a,b) is receivable within two elongated plate members of the arm (50a,b) when the arm (50a,b) is inoperative, as per claims 9 and 14;
- The means (16a,b, 38) for pivoting the arm comprising a fluid actuated cylinder (38), as per claim 10;
- the biasing force exerted on the protuberance sufficient to yieldably bias the protuberance in the recess yet insufficient to retain the protuberance therein upon pivoting from the inoperative to the grappling position, as per claim 13; and
- The arm (50a,b) having a jagged edge (25), as per claim 15.

However, Risch fails to disclose a second member having a yieldably biased, transversely displaceable protuberance triable upon engagement by the one of the arm and receivable in the recess when the arm member is pivoted between the operative and inoperative positions; and

the means for pivoting the arm member being mounted on the underside of the dipper stick, as per claim 8; and

a curved button protuberance receivable in the recess, the button biased outwardly by a spring, as per claim 11; and

Art Unit: 3671

- a bracket having a pair of outwardly, yieldingly biased protuberances
- recesses registerable with the protuberances in a snap-fit manner, as per claim 12.

Heiple et al. discloses a similar grappling assembly wherein the means (34, 35) for pivoting the arm member (30) is mounted on the underside of the dipper stick (10).

Wilson teaches the use of a pair of outwardly, yieldingly biased curved button protuberances (54, see embodiment 41 of Figure 4) and recesses (43) registerable in a snap-fit manner with the protuberances (54) and triable upon engagement by the piece (26) and receivable in the recesses (43), a spring (52) biasing the protuberances (54).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the arm member location of Heiple et al. on the device of Risch in order to avoid interference with the bucket operation.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the connection of Wilson on the device of Risch in order to securely retain parts of an excavation device.

Response to Arguments

5. Applicant's arguments with respect to the amendments made to claims 1 and 8 have been considered but are moot in view of the new ground(s) of rejection.

The examiner would like to point out however, that upon engagement of the arm member with the dipper stick, the detent disclosed by Wilson is triable by inward pressure by a user or operator.

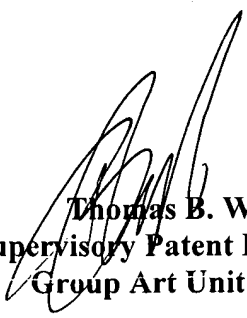
The applicant refers to a Shaw reference in the arguments, the examiner is unaware of any Shaw reference being cited or used in a rejection.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Torres whose telephone number is 571-272-6997. The examiner can normally be reached Monday through Thursday from 7:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached at 571-272-6998.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is 571-272-3600. The fax number for this Group is 571-273-8300.



Thomas B. Will
Supervisory Patent Examiner
Group Art Unit 3671

AMT
November 17, 2006